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EXAMINER	
HOLTON, STEVEN E	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/814,538
Filing Date: March 31, 2004
Appellant(s): HOMER, STEVEN S.

James L. Baudino
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/16/2007 appealing from the Office action mailed 7/25/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,215,480	Danis et al.	4-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-8, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danis et al. (USPN: 6215480), hereinafter Danis.

Regarding claims 1 and 17, the Examiner notes that these claims are similarly related and can be considered together. Danis discloses a pen device with a cylindrical housing (Fig. 1, element 10) and a weight (Fig. 3, element 32) disposed within the cylindrical housing and rotationally coupled relative to the housing (col. 3, lines 28-46). The weight rotates within the cylindrical housing to measure the rotational energy of the cylindrical housing. Danis does not discuss the amount of friction between the weighted cam and the cylindrical housing; however, the amount of friction between the weight and the cylindrical housing would be set at "a desired level of friction to absorb rotational energy". The amount of friction between the housing and the weight would be selected to a desired level so that the amount of absorbed rotational energy would not inhibit the operation of the scrolling of the display text based on the rotation of the weight. The amount of friction between the cylindrical housing and the weight would be set to a relatively low desired level of friction.

Regarding claims 4 and 21, Danis discloses providing a weighted cam rotationally coupled within the cylindrical housing (Fig. 3, element 32; col. 3, lines 28-46). At the time of invention it would be a matter of design choice to construct the weighted cam as a single solid piece or a weight attached to a shaft allowing the weight to rotate around the axis of the shaft. In either arrangement, it would be obvious that

the axis of rotation would need to be the longitudinal axis of the cylinder or parallel to that axis. Otherwise, the weighted cam would not rotate in time with the pen housing and the display would not be correctly updated with the motion of the pen. Thus, the weighted cam described by Danis could be altered into a weight coupled to a shaft and would be disposed along the long axis of the cylindrical housing for measuring the rotation of the pen.

Regarding claim 18, Danis discloses providing the weight inside the cylindrical housing to be rotationally moved (col. 3, lines 28-46).

Regarding claims 2, 3, 5-8, 19, and 20, the Examiner notes that friction is caused by all surfaces in contact with one another and it would be a matter of design choice for providing a frictional surface along the surface of the weight, the cylindrical housing or along a shaft supporting the weight within the pen device. The location of frictional surfaces could be all 3 or any combination of the surfaces depending on the desired level of friction and the coefficient of friction provided by the materials selected for construction of the pen.

(10) Response to Argument

Regarding Appellant's arguments on page 5, called 1, a:

The Appellant has argued that the pen device of Danis, while having a cylindrical housing, with a weight that is eccentrically disposed within the housing would have a level of friction preferred to not absorb rotational energy and thus does not have a desired level of friction to absorb rotational energy.

The Examiner respectfully disagrees with this argument. While Danis does provide a system that would use a low level of friction to allow the display device to maintain a desired display area when the housing is rolled, the low level of friction is the desired level of friction of the system. It is commonly understood that any two surfaces that are in contact with each other produce friction at the point of contact. There are no known frictionless surfaces. Therefore, within the device described by Danis, the weight that is rotationally coupled to the housing must have some level of friction between the housing and the weight. The device described by Danis would desire a low level of friction between the weight and the housing, but the basic nature of the device would mean that some amount of rotational energy would be absorbed by the contact between the weight and the cylindrical housing. Therefore, Danis does read on the claims as selecting a desired level of friction (in this case low friction) to absorb only a small amount of rotational energy from the cylindrical housing so that the display would be allowed to maintain a mostly upright position even when the housing was rolled. Further, the Examiner notes that the ability to change the amount of friction between two surfaces is well-known in the art of mechanical devices. Use of lubricants such as oils and other liquids are commonly used to reduce friction between contacting surfaces. Similarly, 'non-stick' surfaces and smooth surfaces are also used to provide low friction connections between elements. The opposite action, such as not using lubricants or using rough surfaces, is well known to cause an increase in the level of friction between two elements. Therefore, it would be well understood to one of ordinary skill in the art that the Danis device could be modified to select a desired level

of friction between the weight and cylindrical housing. One example would be, a manufacturer experimenting by selecting different levels of friction to determine an optimal amount of rotational movement of the weight relative to the housing to provide a specific operational feel to the device.

Therefore, the Examiner feels that selecting a desired level of friction between the weight and cylindrical housing to absorb a desired amount of rotational energy from the housing would be obvious and well within the abilities of one if ordinary skill in the art.

Regarding the Appellant's arguments on page 7, called argument 1, b:

The Appellant argues that it would not be obvious to dispose a frictional element on the surface of the weight.

The Examiner respectfully disagrees. There must be some amount of friction within the system for measuring the rotation of the display device. If the weighted cam were allowed to rotate with extremely low levels of friction, any rotation of the cylindrical housing would result in unwanted changing of the display device based on extra rotation of the sensor. Different methods of reducing the amount of rotation would be obvious to one of ordinary skill in the art. This could include making it more difficult for the cam to rotate by increasing the friction applied to the weighted cam or allowing friction between the housing and the weight cam to slow the rotation of the cam. As discussed in the previous section, the use of lubricants and specific materials could be chose to produce a desired amount of friction between the housing and the weight. Because all surfaces have some amount of friction, it would be obvious that the surface of the weight could

be applied with a rough surface to increase the amount of friction or the inside of the housing could be made with a rough surface, or any other surface connection within the device could be made with a rough surface to increase friction between elements.

Regarding the Appellant's arguments on pages 8-11, called c-g:

These arguments are related to different embodiments of the invention regarding the location and formation of a frictional element on different surfaces. The knowledge required to place a frictional surface on one element could be similarly applied to other surfaces within the device using known techniques. Therefore, the arguments provided above with regard to argument b could be modified to apply to the limitations of the related arguments.

Regarding the Appellant's argument on pages 12-14, called argument 1, h:

The Appellant argues similarly to those provided in argument 1, a. Specifically that while Danis teaches what would be a low level of friction between the housing and weight and therefore does not teach a desired level of friction to absorb rotational energy of the housing relative to the weight.

The Examiner disagrees based using the arguments presented above for argument 1, a. Mainly, even though Danis would desire a system providing low friction between the weight and the housing. Such a low amount of friction is a desired amount of friction. That level of friction would absorb some amount of the rotational energy generated between the housing and the weight. Selecting a desired amount of friction between the housing and the weight would be a matter of design choice based on knowledge of one of ordinary skill in the art with the use of smooth and rough surfaces

or lubrication to set a desired level of friction to define the type and magnitude of movement of the weight relative to the cylindrical housing.

Regarding the Appellant's arguments on pages 15 and 16, called arguments 1, j and 1,k:

The Appellant argues similar to arguments 1,b - 1,g. That placement of a frictional element on the surface or part of the surface of different elements within the device would not be obvious.

The Examiner refers to the above arguments used in response to arguments 1,b.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Steven E. Holton

Conferees:

Bipin Shalwala

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629

Amr Awad

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